

Figure 1 Triplet Lens System with On and Off Axis Point Sources

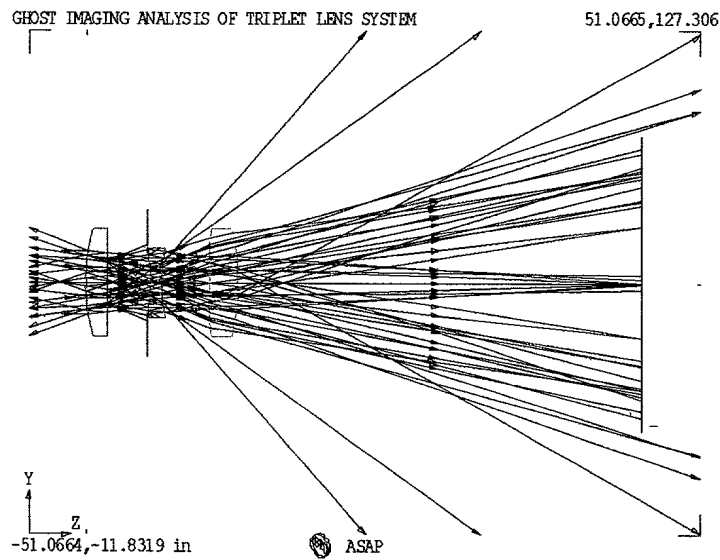


Figure 2 Ghost Reflections through Triplet from On-axis Point Source

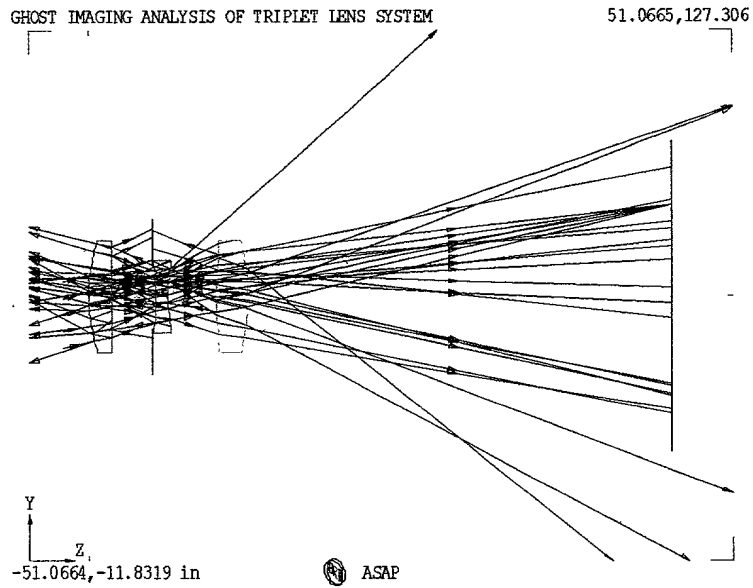


Figure 3 Ghost Reflections through Triplet from Off-axis Point Source

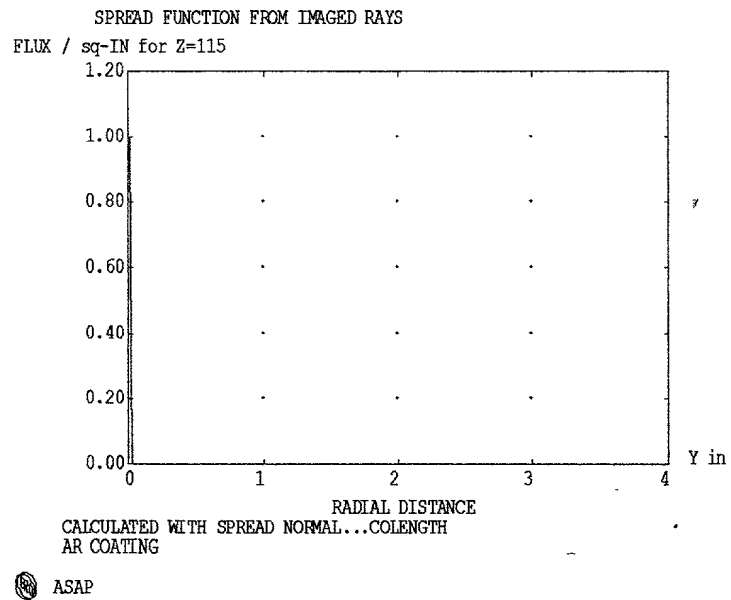


Figure 4 System PSF due to Diffraction and Aberration

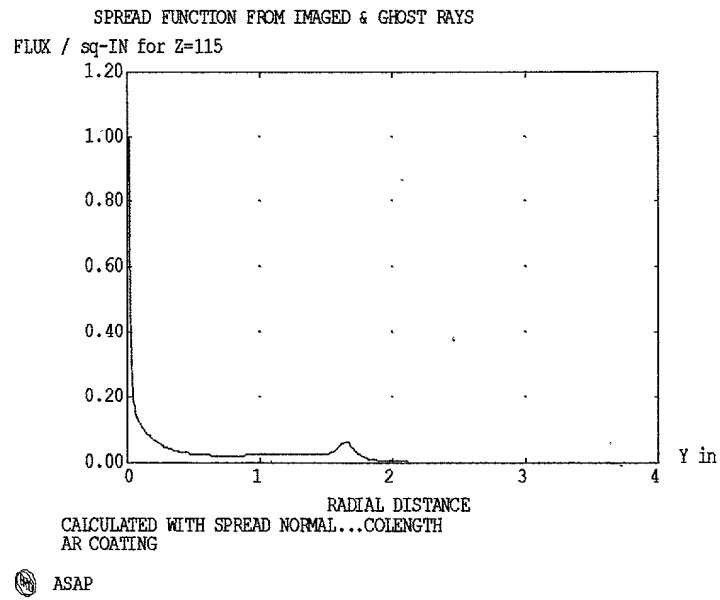
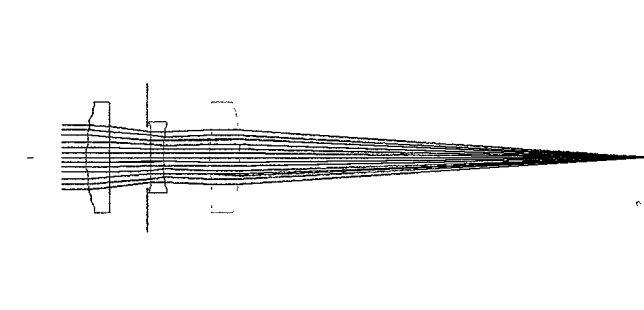


Figure 5 System PSF due to Diffraction, Aberration, and Ghost Images

RAY TRACE FOR PATH 1

51.0665,127.306



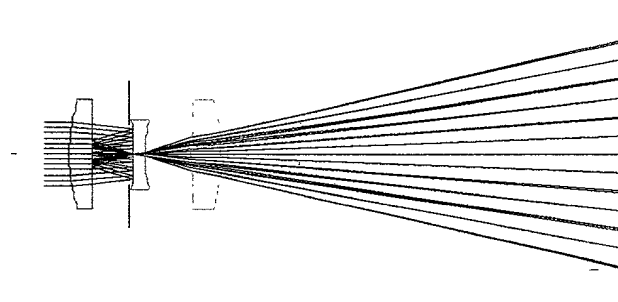
Y
Z
-51.0664,-11.8319 in

ASAP

Figure 6 On-Axis Signal Path

RAY TRACE FOR PATH 2

51.0665,127.306



Y
Z
-51.0664,-11.8319 in

ASAP

Figure 7 On-Axis Ghost Path of Most Energy

RAY TRACE FOR PATH 1

51.0665,127.306

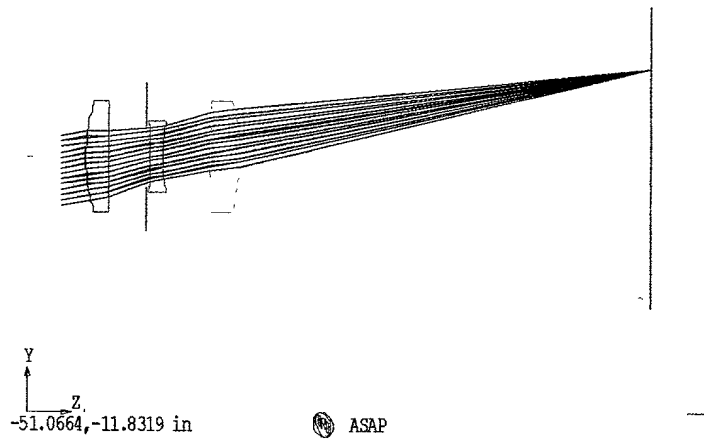


Figure 8 Off-Axis Signal Path

RAY TRACE FOR PATH 3

51.0665,127.306

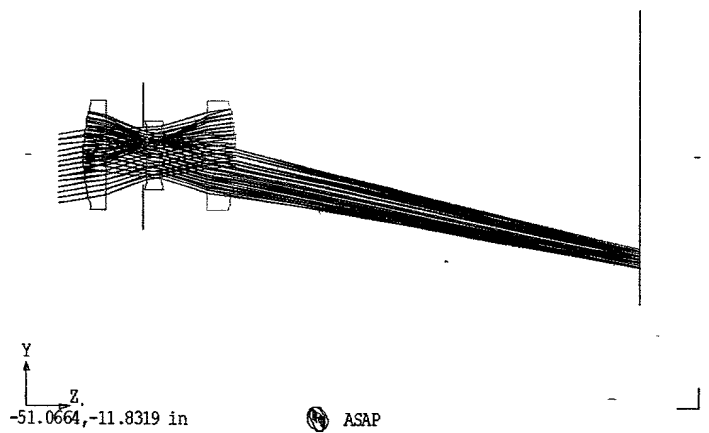


Figure 9 Off-Axis Ghost Path of Most Energy

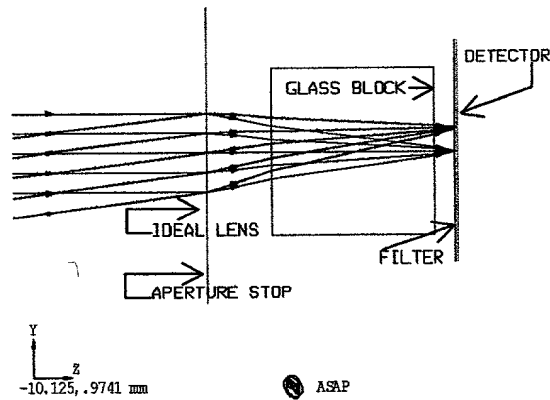


Figure 10 On and Off-axis Point Sources Imaged Through an Ideal Lens with the Stop at the Lens, A glass block, and a Filter

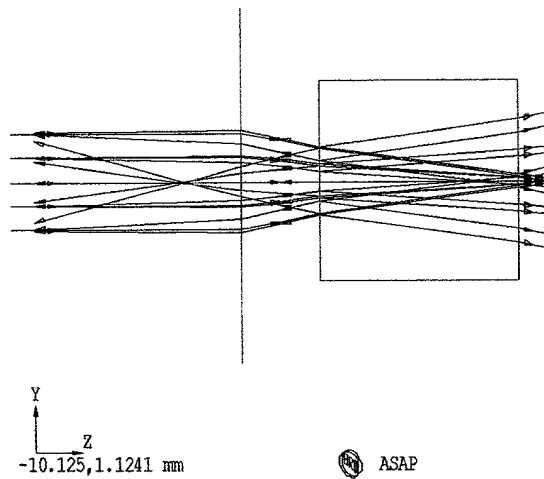
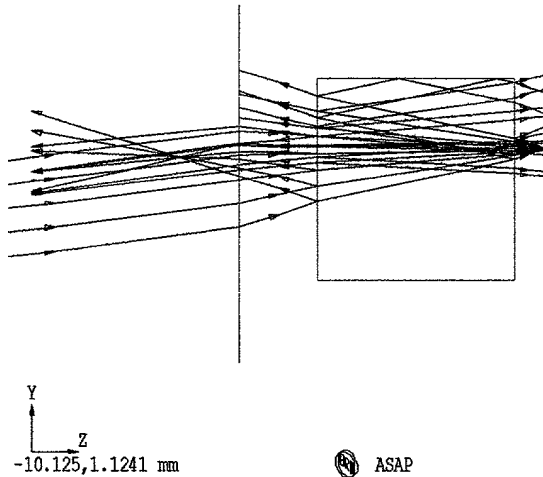


Figure 11 On-axis Ghost Rays



ASAP

Figure 12 Off-axis Ghost Rays

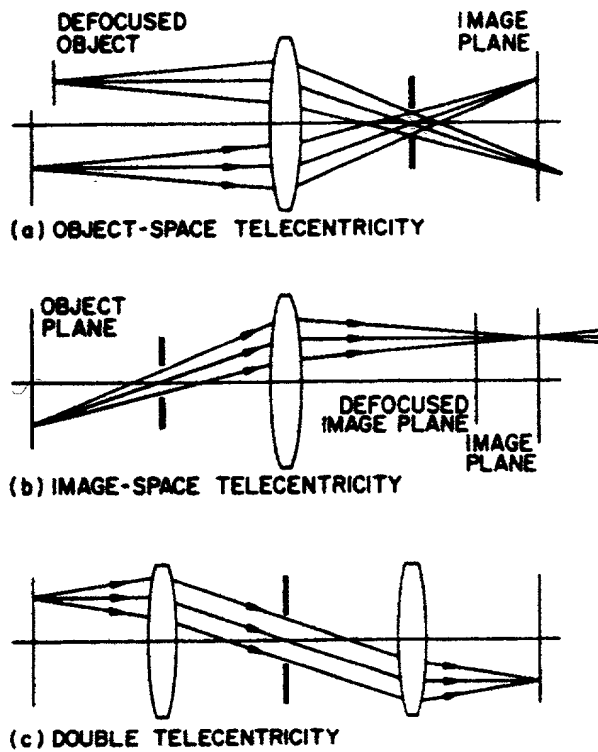


Figure 13 Telecentric Optical Systems

IDEAL TELECENTRIC SYSTEM

11.6265,26.2566

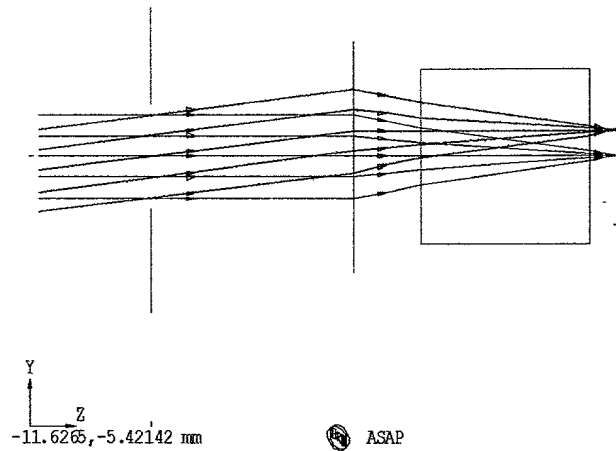


Figure 14 On and Off-axis Point Sources Imaged Through an Ideal Telecentric Lens System with the Stop at the front focal point, A glass block, and a Filter

IDEAL TELECENTRIC SYSTEM ILLUSTRATING GHOST IMAGING

11.6265,26.2566

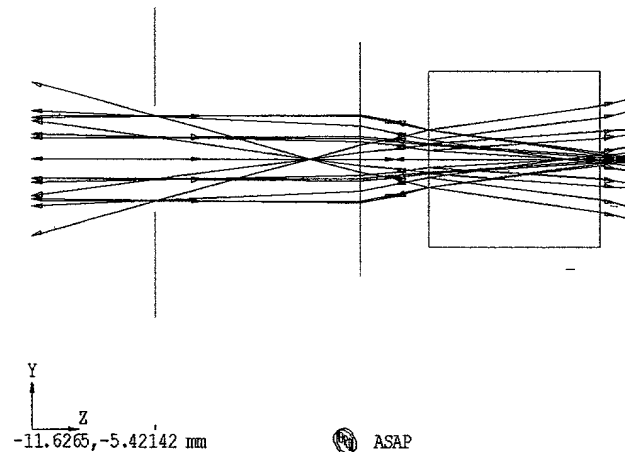


Figure 15 Ghost Image for an On-axis Point Source Through a Telecentric Optical System that is Telecentric in Image Space

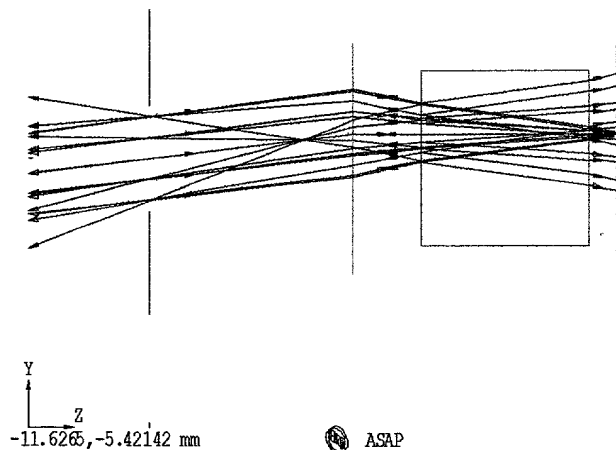
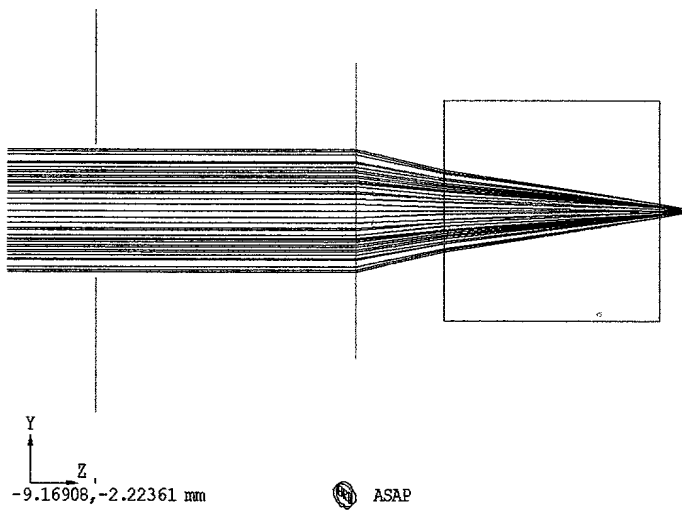


Figure 16 Ghost Image for an Off-axis Point Source Through a Telecentric Optical System that is Telecentric in Image Space

RAY TRACE FOR PATH 1 | 0 DEGREE FIELD ANGLE

9.16908,22.7588



RAY TRACE FOR PATH 1 | 7 DEGREE FIELD ANGLE

9.16908,22.7588

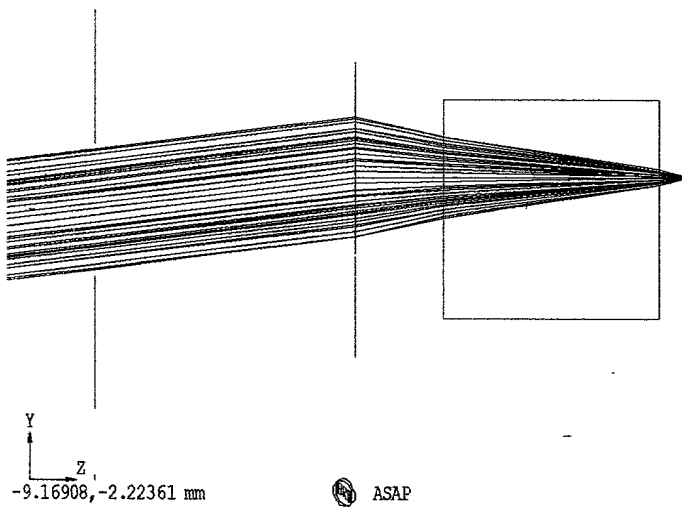
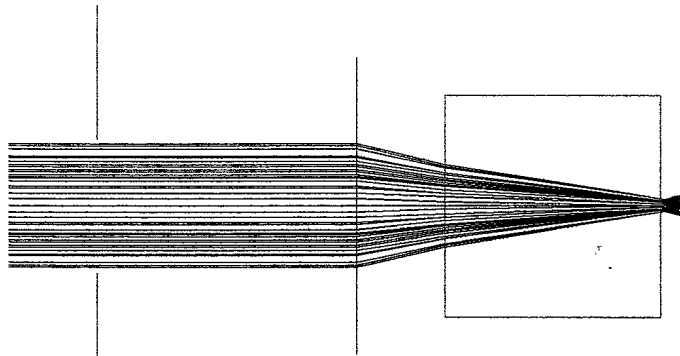


Figure 17 On and Off-axis Signal Paths

RAY TRACE FOR PATH 3 | 0 DEGREE FIELD ANGLE

9.16908,22.7588

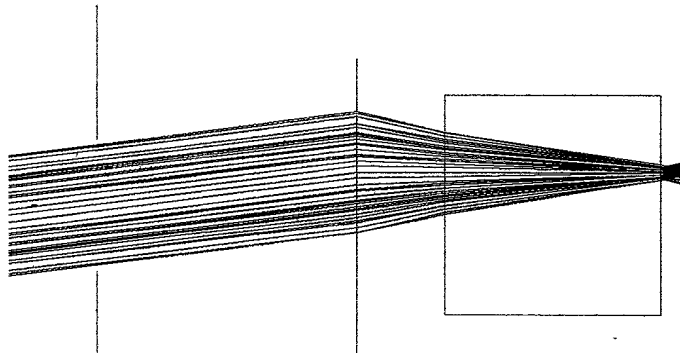


Y
Z
-9.16908,-2.22361 mm

ASAP

RAY TRACE FOR PATH 3 | 7 DEGREE FIELD ANGLE

9.16908,22.7588



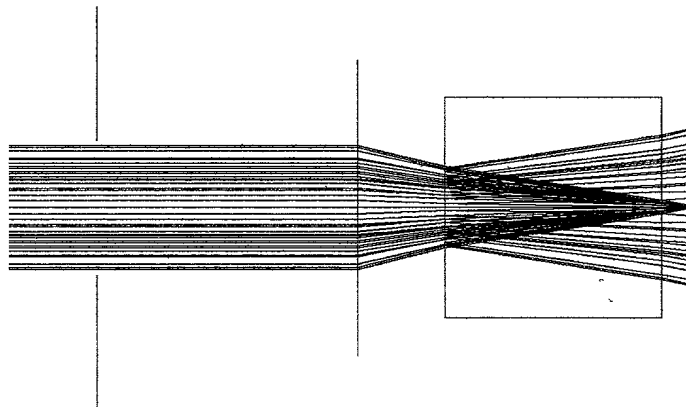
Y
Z
-9.16908,-2.22361 mm

ASAP

Figure 18 On and Off-axis Most Energetic Ghost Paths

RAY TRACE FOR PATH 4 | 0 DEGREE FIELD ANGLE

9.16908,22.7588

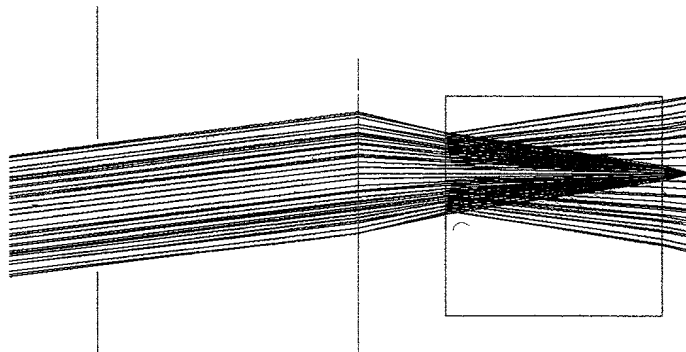


Y
Z
-9.16908,-2.22361 mm

ASAP

RAY TRACE FOR PATH 4 | 7 DEGREE FIELD ANGLE

9.16908,22.7588



Y
Z
-9.16908,-2.22361 mm

ASAP

Figure 19 On and Off-axis Second Most Energetic Ghost Paths

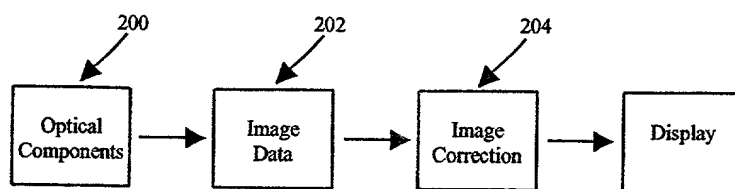


Figure 20

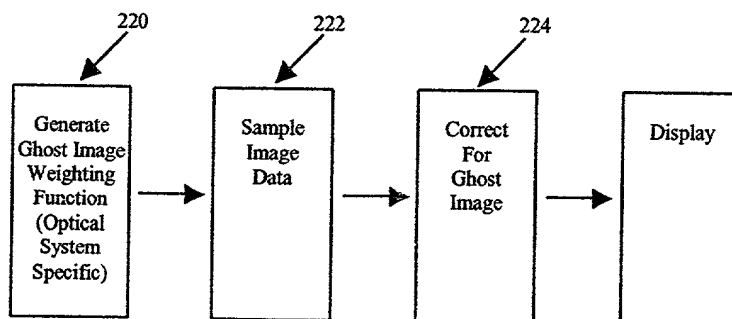


Figure 21